PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-252009
(43)Date of publication of application : 17.09.1999

---

(51)Int.CL H04B 7/26
H04Q 7/38

---

(21)Application number : 11-000084
(22)Date of filing : 04.01.1999

(71)Applicant : NOKIA MOBILE PHONES LTD
(72)Inventor : KORPELA MIKKO
PUSSINEN ARTO
RANTA JUKKA

---

(30)Priority

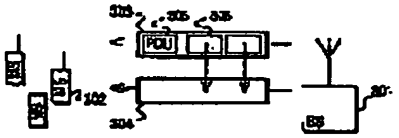
Priority number :	Priority date :	Priority country :
98 980014	05.01.1998	FI
98 981663	27.07.1998	FI

---

(54) METHOD FOR TRANSMITTING CONTROL INFORMATION FROM BASE STATION TO MOBILE STATION AND METHOD FOR RECEIVING CONTROL INFORMATION FROM BASE STATION AT MOBILE STATION

(57)Abstract:

PROBLEM TO BE SOLVED: To transmit common control data which change in an amount at a cell by displaying the position of one piece of control information on a second channel on a first channel at a first point of time and transmitting one piece of control information through the second channel at a second point of time after the first point of time.
SOLUTION: A base station 301 enables the transmission of control information through a broadcasting control information channel 303 to a lot of mobile stations 302 and the designation of a point-to-multipoint(PTM) traffic channel 304 as well. The current network, location area and cell ID or the like in the fixed minimum quantity of certain control information to be transmitted through the channel 303 are transmitted by respective protocol data units(DU) 305. A remaining pointer DU 306 designates and transmits the real information to the channel 304 while containing only the display of contents and positions of cells in the channel constitution. Thus, even without securing relevant capacity in the beginning, because of common control structure, the capacity can be added.



LEGAL STATUS
[Date of request for examination] 27.06.2002
[Date of sending the examiner's decision of rejection]
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]
[Date of final disposal for application]
[Patent number]
[Date of registration]
[Number of appeal against examiner's decision of rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-205342
(43)Date of publication of application : 30.07.1999

---

(51)Int.Cl.	H04L 12/28 H04B 7/26 H04Q 7/38

---

(21)Application number : 10-008485
(22)Date of filing : 20.01.1998

(71)Applicant : NIPPON TELEGR & TELEPH CORP <NTT>
(72)Inventor : ICHIKAWA TAKEO
TAKANASHI HITOSHI
IIZUKA MASATAKA
MORIKURA MASAHIRO

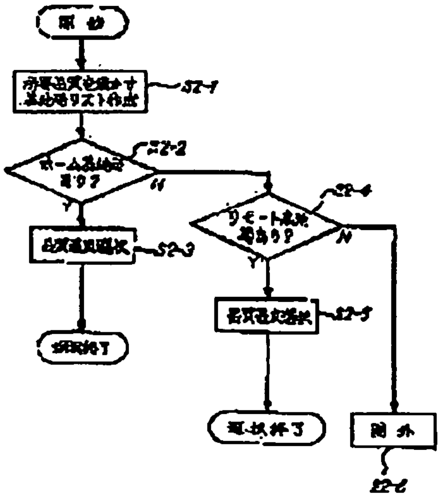
---

(54) RADIO BASE STATION SELECTION METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To utilize a packet transfer protocol between a home network and a remote network and to continue communication by selecting a remote network base station to satisfy a required quality when a home network base station to satisfy the required quality is not present.

SOLUTION: A base station cyclically transmits its own base station ID and a domain ID by means of reporting signals. A radio LAN terminal receives the reporting signals of peripheral base stations for a fixed period and prepares a list of base stations to satisfy a required quality (S-1). In the case a home base station is present inside the base station list (Y of S2-2), the home base station of best quality is selected (S2-3). When a home base station is not present (N of S2-2), the remote base station of the best quality of is selected (S2-4 and S2-5). If the base station to satisfy the required quality is not present (N of S2-4), it is judged as the outside of a service area (S2-6).



LEGAL STATUS

[Date of request for examination]	16.12.1998
[Date of sending the examiner's decision of rejection]	
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]	
[Date of final disposal for application]	
[Patent number]	2963424
[Date of registration]	06.08.1999
[Number of appeal against examiner's decision of rejection]	
[Date of requesting appeal against examiner's decision of rejection]	
[Date of extinction of right]	

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-113044
(43)Date of publication of application : 23.04.1999

(51)Int.Cl. H04Q 7/28

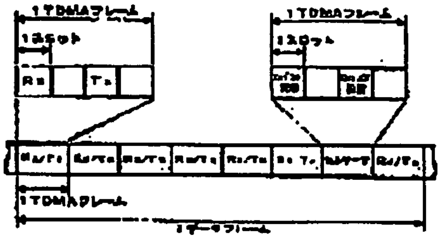
(21)Application number : 09-267374
(22)Date of filing : 30.09.1997
(71)Applicant : SONY CORP
(72)Inventor : SAKOTA KAZUYUKI
SUZUKI MITSUHIRO

(54) COMMUNICATION METHOD, TRANSMISSION METHOD, RECEPTION METHOD BASE STATION AND TERMINAL EQUIPMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To search a base station efficiently by a terminal equipment in a radio telephone system.

SOLUTION: Communication of user information between a base station and a terminal equipment is conducted intermittently for a prescribed time slot period, and the terminal equipment stops transmission/reception of the user information once for plural number of times of the prescribed time slot periods for intermittent communication and searches a cell of receiving a frequency channel through which control information is sent from the base station to conduct search processing of the base stations. Furthermore, the period for cell searching is increased/decreased at any time.



LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 11-075237
(43)Date of publication of application : 16.03.1999

(51)Int.Cl. H04Q 7/22
H04Q 7/38

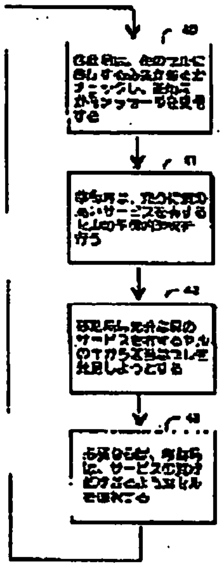
(21)Application number : 10-178829
(22)Date of filing : 25.06.1998

(71)Applicant : NOKIA MOBILE PHONES LTD
(72)Inventor : KORPELA MIKKO
JUTILA SAMI
PUSSINEN ARTO
PIRTTIKANGAS KARI
LINTULAMPI RAINO

(30)Priority
Priority number : 97 972736 Priority date : 25.06.1997 Priority country : FI

(54) INFORMATION TRANSMISSION, CELL RE-SELECTION METHOD, BASE STATION AND MOBILE STATION IN CELLULAR RADIO SYSTEM

(57)Abstract:
PROBLEM TO BE SOLVED: To realize an information transmission and re-selection method in a cellular radio system.
SOLUTION: A base station of the cellular radio system generates a message including information relating to an adjacent cell and sends the message to a mobile station. The base station includes other information characterizing the adjacent cell in addition to a transmission frequency used for the adjacent cell to its message and also includes information relating to the service quality. The mobile station based on the information makes preliminary selection of a new group most advantageous and conducts measurement of the cells selected preliminarily (41). In the case that at least one new proper cell is in existence through the measurement, the mobile station selects a new cell from the group (42). When it is discriminated that there is no proper new cell, the mobile station selects the new cell from other groups (43).



LEGAL STATUS
[Date of request for examination]
[Date of sending the examiner's decision of rejection]
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]
[Date of final disposal for application]
[Patent number]
[Date of registration]
[Number of appeal against examiner's decision of rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 10-066154
(43)Date of publication of application : 06.03.1998

---

(51)Int.CL H04Q 7/38
H04Q 7/26

---

(21)Application number : 08-235926
(22)Date of filing : 19.08.1996

(71)Applicant : NEC CORP
NEC TELECOM SYST LTD
(72)Inventor : ARIGA KENICHI
TADA TETSUNORI

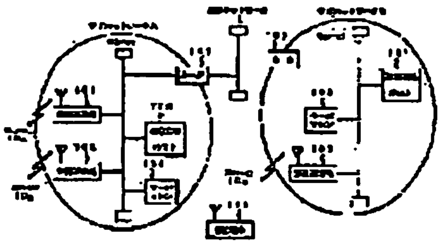
---

(54) RADIO MOBILE TERMINAL AND ITS CONNECTING CONTROL METHOD

(57)Abstract:

PROBLEM TO BE SOLVED: To achieve reduction in traffic, the improvement of transmission efficiency and the acceleration of communication of a radio mobile terminal itself in mobile communication of a subnetwork structure.

SOLUTION: Radio base stations that respectively belong to subnetworks A and B periodically signal identification information (Sub-net ID) of the subnetworks A and B to which they respectively belong. In a radio mobile terminal 110 the identification information of the subnetworks A and B is held in advance which become its home network. When the terminal 110 performs communication, the terminal 110 retrieves a stable control channel from radio waves which are emitted by these radio base stations, preferentially selects a control channel where subnetwork identification information of signaling information matches the identification information held among stable control channels and starts communication with the radio base station.



LEGAL STATUS

[Date of request for examination]	19.08.1996
[Date of sending the examiner's decision of rejection]	
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]	
[Date of final disposal for application]	
[Patent number]	2908341
[Date of registration]	02.04.1999
[Number of appeal against examiner's decision of rejection]	
[Date of requesting appeal against examiner's decision of rejection]	
[Date of extinction of right]	

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 09-036800
(43)Date of publication of application : 07.02.1997

---

(51)Int.Cl.

H04B 7/26
G01R 29/08
H04B 1/40
H04Q 7/38

---

(21)Application number : 07-187521
(22)Date of filing : 24.07.1995

(71)Applicant : N T T IDO TSUSHINMO KK
(72)Inventor : HATTORI HIROYUKI
TAKAMI TADAO
OKAJIMA ICHIRO

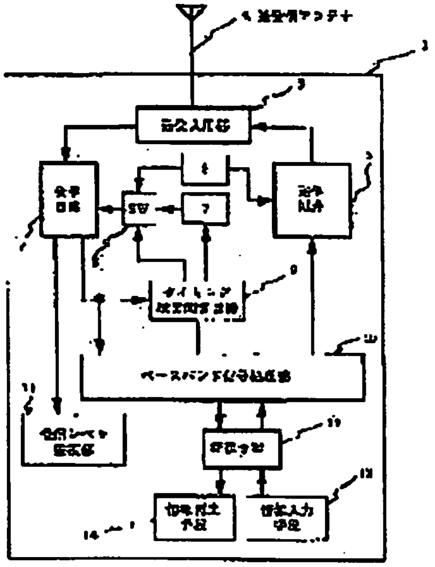
---

(54) MOBILE RADIO EQUIPMENT

(57)Abstract:

PROBLEM TO BE SOLVED: To make high speed information transmission compatible with low power consumption by providing two oscillation means or over, a changeover means selecting a local oscillation signal, a timing detection control means and a reception level monitor means measuring a reception level.

SOLUTION: A timing detection control circuit 9 detects a timing used to detect a reception level of a surrounding zone among bits not necessarily received at all times among bits received to keep a radio channel other than information bits in a received frame signal. Then the control circuit 9 outputs a control signal switching a local oscillation signal given to a reception circuit 4 to be switched to a surrounding zone reception level detection oscillator 7 to a switch 8. Since the reception frequency is a surrounding zone monitor carrier f1 by the changeover of the switch 8, after the reception level measurement of the surrounding zone is finished, the circuit 9 outputs a control signal to restore the switch 8 to the position of the information signal transmission reception oscillator 6 and the information bits are again received. The output of the oscillator 7 is switched to measure remaining (n-1) sets of monitor carriers.



LEGAL STATUS

[Date of request for examination]	02.02.1998
[Date of sending the examiner's decision of rejection]	
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]	
[Date of final disposal for application]	
[Patent number]	2965132
[Date of registration]	13.08.1999
[Number of appeal against examiner's decision of rejection]	
[Date of requesting appeal against examiner's decision of rejection]	
[Date of extinction of right]	

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 08-191305
(43)Date of publication of application : 23.07.1996

---

(51)Int.Cl. H04L 12/28

---

(21)Application number : 07-002481
(22)Date of filing : 11.01.1995

(71)Applicant : FUJITSU LTD
(72)Inventor : KOBAYASHI HISAFUMI
YOMO KIYOTAKA
SEKIHASHI OSAMU

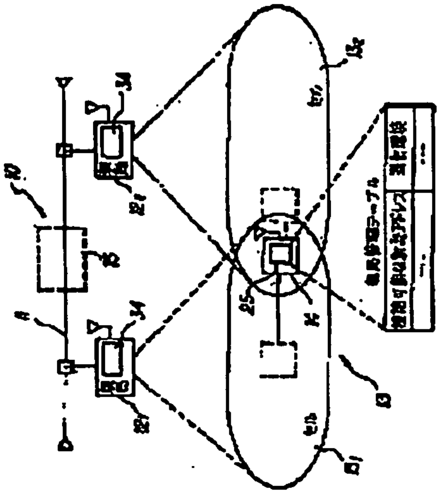
---

(54) WIRELESS LAN SYSTEM

(57)Abstract:

PURPOSE: To switch a master station in a short time without searching for the master station when a new master station needs to be connected as a result of roaming from cell to cell.

CONSTITUTION: A mobile slave station 14 searches for a master station which can be connected periodically and the address of the found master station which can be connected is stored in a master station management table 25. If the mobile slave station 14 roames from one cell to another in this state, the state of a communication with the old master station 121 becomes worse. When the state of the communication with the old master station becomes worse and the new master station needs to be connected, the mobile slave station 14 sends a connection request to the master station held in the master station management table 25 to make a communication through the new master station 122.



LEGAL STATUS

[Date of request for examination]	24.03.2000
[Date of sending the examiner's decision of rejection]	
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]	
[Date of final disposal for application]	
[Patent number]	3251797
[Date of registration]	16.11.2001
[Number of appeal against examiner's decision of rejection]	
[Date of requesting appeal against examiner's decision of rejection]	
[Date of extinction of right]	

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 07-307971
(43)Date of publication of application : 21.11.1995

---

(51)Int.Cl. H04Q 7/22
H04Q 7/38
H04L 12/28

---

(21)Application number : 07-056927
(22)Date of filing : 16.03.1995

(71)Applicant : FUJITSU LTD
(72)Inventor : TAKAHASHI ATSUSHI
SUZUKI TADAHARU

---

(30)Priority
Priority number : 06 46884 Priority date : 17.03.1994 Priority country : JP

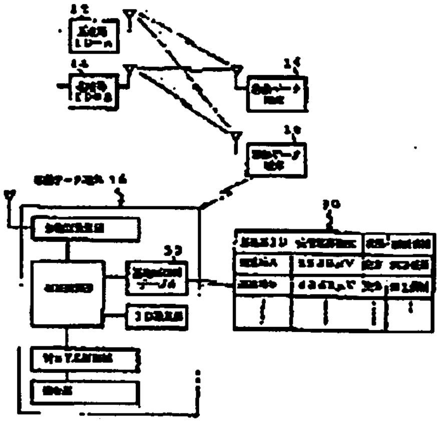
---

(54) SELECTION SYSTEM FOR OPTIMUM COMMUNICATION OPPOSITE PARTY OF MOBILE DATA TERMINAL

(57)Abstract

PURPOSE: To efficiently perform the radio transmission processing in response to the high traffic processing by selecting a base station that is optimum at the current time point as the opposite party of communication and settling a radio circuit through a mobile data terminal.

CONSTITUTION: A mobile data terminal 16 is provided with a base station control table 30 where the reception field strength of each base station 14 is registered together with the information on the operating state of each station 14. Then a station 14 of the optimum opposite party of communication, i.e., the station 14 that is kept free and has the highest reception field strength is selected from the table 30, and a radio communication circuit is settled through the terminal 16. Thus the station 14 is selected and the radio circuit is settled by the communication requests given from the terminal 16. As a result, a multizone function is simply attained without controlling the position of the terminal at the base station side nor requiring the inter-base station control at the side of a computer that is connected to the base station.



LEGAL STATUS
[Date of request for examination]
[Date of sending the examiner's decision of rejection]
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]
[Date of final disposal for application]
[Patent number]
[Date of registration]
[Number of appeal against examiner's decision of rejection]
[Date of requesting appeal against examiner's decision of rejection]
[Date of extinction of right]

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 07-297841
(43)Date of publication of application : 10.11.1995

---

(51)Int.Cl.
H04L 12/28
G06F 13/00
H04Q 7/22

---

(21)Application number : 07-022878
(22)Date of filing : 10.02.1995

(71)Applicant : INTERNATL BUSINESS MACH CORP <IBM>
(72)Inventor : HUANG CHIA-CHI
BANTZ DAVID F
BAUCHOT FREDERIC
NATARAJAN KADATHUR S
NARASIMHAN ANAND
WETTERWALD MICHELE M

---

(30)Priority
Priority number : 94 226724 Priority date : 12.04.1994 Priority country : US

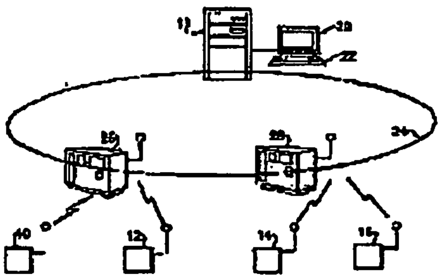
---

(54) HANDS-OFF MONITOR METHOD FOR WIRELESS COMMUNICATION NETWORK

(57)Abstract:

PURPOSE: To provide a method for hands-off for a wireless communication network.

CONSTITUTION: Base stations 26 and 28 have geographical areas. In these areas, plural mobile stations 10, 12, 14 and 16 can communicate with one base station; the base station can perform bidirectional wireless communication with the mobile stations through frequency hopping under the control of a controller 18; and there are (n) pieces of frequency-hopping channels having the same fixed period in a fixed frequency band and having a fixed frequency different from other channels. When the mobile stations determine the quality of transmission to be lower than a prescribed level, and the mobile stations listen to the respective continuous frequency channel for a period practically shorter than a fixed period until the mobile stations detect transmission, then, in response to the detected transmission, the mobile station control is to other base stations.



LEGAL STATUS

[Date of request for examination]	15.04.1997
[Date of sending the examiner's decision of rejection]	
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]	
[Date of final disposal for application]	
[Patent number]	3202883
[Date of registration]	22.06.2001
[Number of appeal against examiner's decision of rejection]	
[Date of requesting appeal against examiner's decision of rejection]	
[Date of extinction of right]	

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 06-244781
(43)Date of publication of application : 02.09.1994

---

(51)Int.Cl.	H04B 7/26		
(21)Application number :	05-347268	(71)Applicant :	AT & T GLOBAL INF SOLUTIONS INTERNATL INC
(22)Date of filing :	27.12.1993	(72)Inventor :	BREDERVELD LOEKE DIEPSTRATEN WILHELMUS J M HAAGH JOHANNES P N MOELARD HENDRIK HOOGENDOORN JAN

(30)Priority

Priority number : 93 9300310 Priority date : 08.01.1993 Priority country : GB

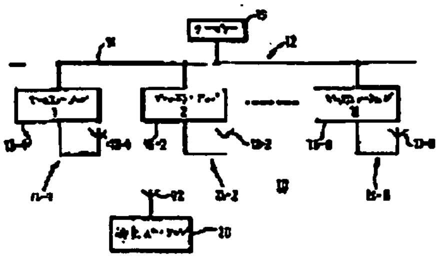
---

(54) TRANSFER PROCEDURE FOR MOBILE RADIO STATION

(57)Abstract:

PURPOSE: To obtain a method for operating a radio LAN system in which the transfer of communication by a mobile station can be achieved by a simple method.

CONSTITUTION: A radio LAN 10 includes plural base stations 16 connected with a wire LAN. Each base establishes a communication cell 24, and a mobile radio station 20 is allowed to roam among those cells. Those base stations periodically generate a beacon message. The mobile station decides the communication quality value of the beacon message for the cell in which it is positioned at present, and when this quality is unallowable, this is switched to a search mode in which the beacon message from the arbitrary base station can be received, and the communication quality is decided. The mobile station is switched so that communication can be attained with the base station which applies the beacon message having the allowable communication quality.



LEGAL STATUS

[Date of request for examination]	01.05.1997
[Date of sending the examiner's decision of rejection]	07.12.1999
[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]	
[Date of final disposal for application]	
[Patent number]	3104514
[Date of registration]	01.09.2000
[Number of appeal against examiner's decision of rejection]	2000-03051
[Date of requesting appeal against examiner's decision of rejection]	06.03.2000
[Date of extinction of right]	